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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,102

06/19/2006

Thomas Klettke

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EXAMINER

YOON, TAE H

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

04/29/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/564,102	Applicant(s) KLETTKE ET AL.	
	Examiner Tae H. Yoon	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/29/07</u> . | 6) <input type="checkbox"/> Other: ____. |

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Improper Markush language is seen and substitution of “or” with “,” in lines 3 is suggested.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eckhardt et al (US 2003/0153726 A1).

Eckhardt et al teach a catalyst system for N-alkylazirino polyether in abstract and examples wherein p-toluenesulfonic acid monohydrate is seen. Also, use of various inert diluents such as the instant amides of alkylsulfonic acids and arylsulfonic acids is taught in PP [0049].

Thus, use of said amides of alkylsulfonic acids and arylsulfonic acids in said examples would be anticipation since Eckhardt et al teach and equate said diluents.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhardt et al (US 2003/0153726 A1) in view of Schmitt et al (US 4,167,618).

Eckhardt et al teach a composition comprising a catalyst system and N-alkylazirino polyether in abstract and examples in which other additives are seen. Use of various inert diluents such as the instant amides of alkylsulfonic acids and arylsulfonic acids is taught in PP [0049]. The alkyl and aryl groups for said sulfonic acids encompass the instantly recited alkyl and aryl groups or the instantly recited alkyl and aryl groups would be at least obvious modification to one skilled in the art. Said amides of alkylsulfonic acids and arylsulfonic have a molecular weight of at least 90. Two-part system is taught in PP [0001] [0078]. Examples teach employing other additives.

The instant invention further recites an initiator over Eckhardt et al. However, the instant initiator for polymerization of aziridine compounds is well known in the art as taught by Schmitt et al (abstract) who also teach a two-part dental impression material and additives in examples.

Thus, it would have been obvious to one skilled in the art at the time of invention to utilize the initiator of Schmitt et al in Eckhardt et al as a third part or a combination of a catalyst part since said initiator would provide a faster polymerization or curing of said N-alkylazirino polyether and since use of two-part or three-part kit would be obvious design choice to one skilled in the art and since both prior art teach a separation of the initiator and catalyst from N-alkylazirino polyether component during storage and since use of said initiator in the composition of Eckhardt et al would have the instant working time absent showing otherwise.

Claims 1-4, 6, 7, 9, 10 and 13-15 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zech et al (US 6,894,144).

Zech et al teach a two-part composition comprising a catalyst and N-alkylazirino polyether in abstract and examples in which other additives are seen. Use of various inert diluents such as the instant amides of alkylsulfonic acids and arylsulfonic acids is taught at col. 6, lines 14-19.

Thus, use of said amides of alkylsulfonic acids and arylsulfonic acids in examples would be anticipation since choice is very limited. See *In re Arkley*, 455 f2d 586, 172 USPQ 524 (CCPA 1972); *In re Petering*, 301 F2d 676, 133 USPQ 275 (CCPA 1962).

Claims 1-4, 6, 7, 9, 10 and 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zech et al (WO 01/17483).

Zech et al (WO 01/17483) is equivalent to above US 6,894,144 as evidenced by the Item (87) in the front page of said US patent. Thus, a copy is not enclosed.

Thus, the invention lacks novelty.

Claims 1-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zech et al (US 6,894,144 or WO 01/17483).

The instant invention further recites two-part composition and N-alkyl and N-aryl substituted amides of alkylsulfonic acids and arylsulfonic acids over amides of alkylsulfonic acids and arylsulfonic acids of Zech et al.

However, it would have been obvious to one skilled in the art to either add N-alkyl and N-aryl substituted amides of alkylsulfonic acids and arylsulfonic acids to the catalyst or to the N-alkylazirino polyether since Zech et al teach that said N-alkyl and N-aryl substituted amides of alkylsulfonic acids and arylsulfonic acids are inert diluents, and to utilize the instantly substituted amides of alkylsulfonic acids and arylsulfonic

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acids in Zech et al since said alkyl encompasses the instant ethyl and butyl groups and since said aryl encompasses the instant benzene absent showing otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tae H Yoon/
Primary Examiner
Art Unit 1796

THY/April 23, 2009